



Virginia Wastewater Surveillance Program: Community of Practice

WWS Team

VDH | Office of Environmental Health Services

First meeting: May 26th, 2021



Agenda

Introduction & Objectives of CoP (5 mins)

Introduction of Group Members (5 mins)

Updates & Funding Options/Form (10 mins)

Open Discussion: Questions & Special Topics (10 mins)



CoP Introduction & Objectives

Who?

All those involved in surveillance of SARS-CoV-2 in wastewater within the state of Virginia.

[utilities, labs, researchers, public health, government, etc.]

Why?

Collaboration and data sharing.

[data questions concerns innovations etc.]

Why Focus on Community of Practice?

	For Members	For Organizations
Short-term Value	<ul style="list-style-type: none">● Help with challenges● Access to expertise● Confidence● Fun with colleagues● Meaningful work	<ul style="list-style-type: none">● Problem solving● Time saving● Knowledge sharing● Synergies across sectors/districts● Reuse of resources
Long-term Value	<ul style="list-style-type: none">● Personal development● Enhanced reputation● Professional identity● Networking	<ul style="list-style-type: none">● Strategic capabilities● Keeping up-to-date● Innovation● Retention of talents● New strategies

VDH WWS Team Members



Rekha Singh, PhD, MPH
Wastewater Surveillance Manager



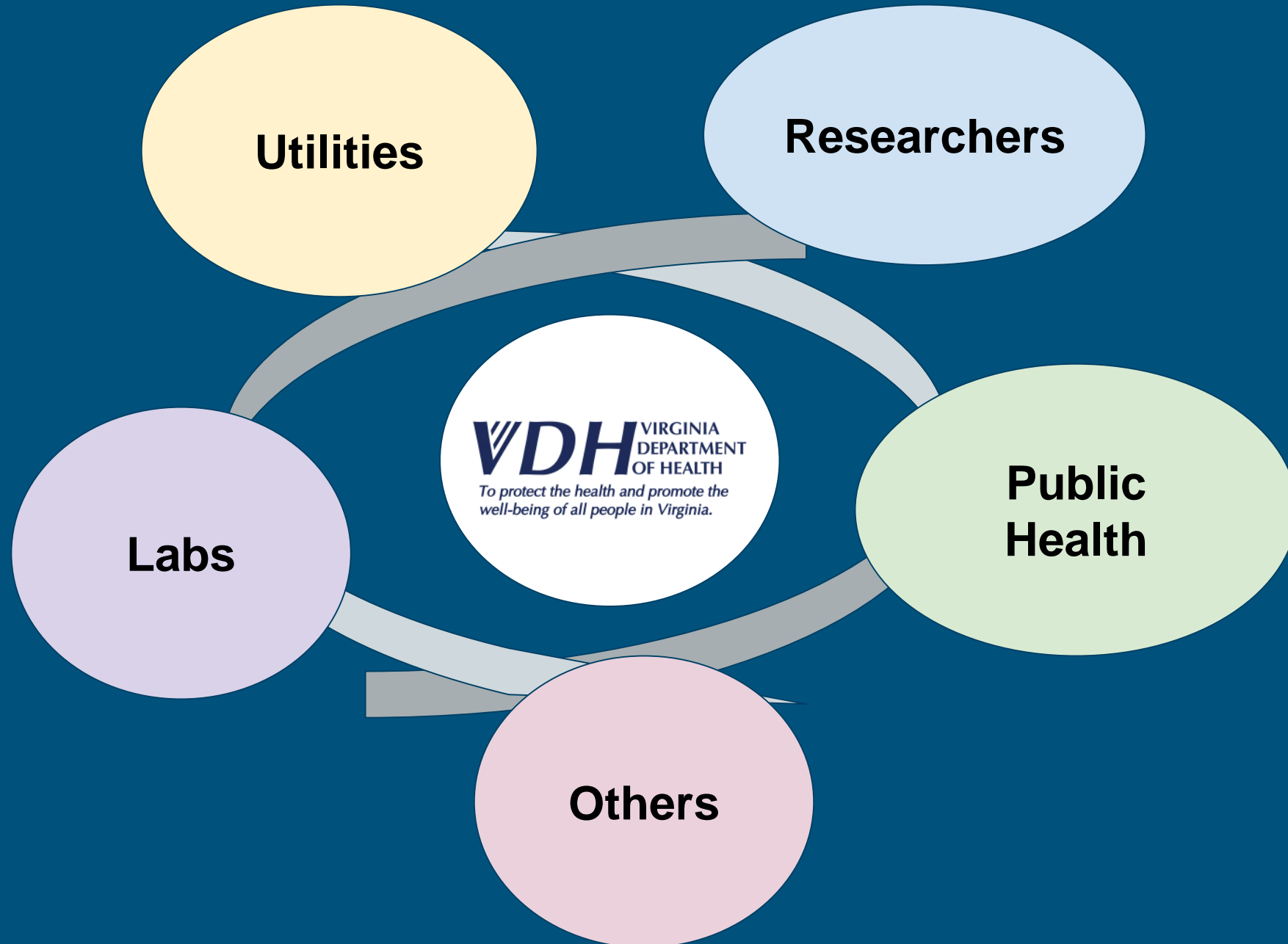
Marcia Degen, PhD, PE
Project Coordinator



Haniyyah Majeed, MS
Wastewater Surveillance Technical
Program Specialist



Michelle Yancey, MPH
Wastewater Surveillance Data Analyst



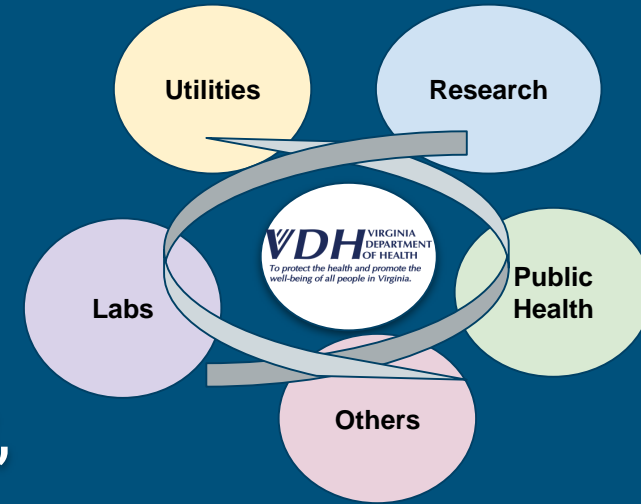
Introducing Group Members

Utilities:

Harrisonburg Rockingham Regional Sewer Authority, Stafford County, Upper Occoquan Service Authority (Fairfax), Rivanna Water and Sewer Authority (Albemarle), Western Virginia Water Authority (Roanoke), AlexRenew (Alexandria), Hampton Roads Sanitation District, Norman M. Cole Pollution Control Plant (Fairfax), Pepper's Ferry Wastewater Treatment Authority

Labs:

DCLS, Biobot, Pace National Analytical, Innova Prep



Continued.....

Researchers:

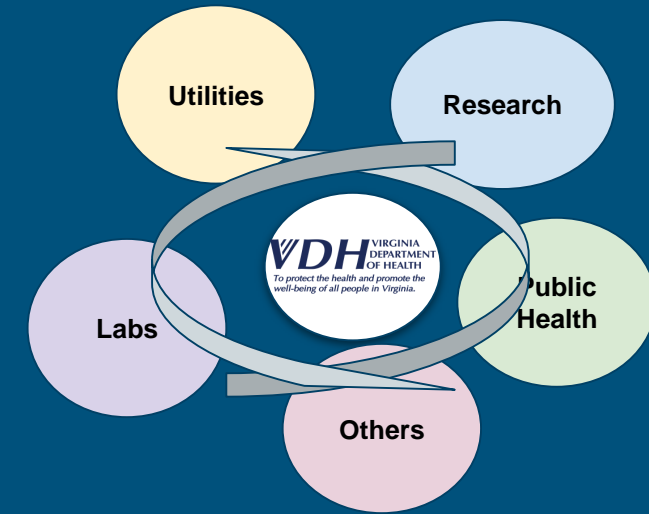
University of California Merced,
University of Virginia, Virginia Tech, Old Dominion
University, Radford University

Public Health:

Virginia Department of Health, Office of Epidemiology

Others:

DEQ, Metropolitan Council (Twin Cities MN), Town of
Purcellville, AquaLaw, City of Martinsville, City of
Richmond, City of Chesapeake, Virginia Department of
Corrections, City of Roanoke, City of Danville



Purpose

To bring the Virginia wastewater community together for *sharing of ideas and data*, ultimately enhancing WWS.

The CoP can be used to *support policy* for improving community health and developing recommendations for Standards of Practice.



All Testing & Active Workgroups - We want you!

Southwestern Workgroup

UNIVERSITY of VIRGINIA

WESTERN VIRGINIA WATER AUTHORITY

RUC RADFORD UNIVERSITY CARILION

VT VIRGINIA TECH™

Purcellville

Centreville

Loudoun Water

Alexandria

Fairfax

Stafford County

UVA

VMI & W&L

Waynesboro

Harrisonburg

Lynchburg

Richmond

Virginia Tech & Blacksburg

Danville

HRSD Service Area

Chesapeake VIRGINIA

OLD DOMINION UNIVERSITY

HRSD

Eastern Workgroup

Format

- Monthly online meetings
- ~30 minutes
- Focus: Information & Collaboration
- Min requirements: Virginia WWS updates, open discussion time
- Options: Rotating group member topics, educational presentations, breakout sessions

Send us questions/topics you'd like to discuss!

Virginia Goals Updates

Goal 1. Data Collection

- ✓ Created **data template**
- ✓ Disseminated **HHS Phase 1 data**
- ✓ Compile data from **ongoing projects**

Goal 2. Data Analysis and Visualization

- ✓ Explore data **analysis** options
- ✓ Weekly data **uploads** to **NWSS**
- ✓ Retrieve **case data** and **sewershed** boundaries

Goal 3. Community of Practice

- ✓ Hosted several **information sessions**
- ✓ First **steering committee** meeting
- ✓ **Monthly CoP meetings!**

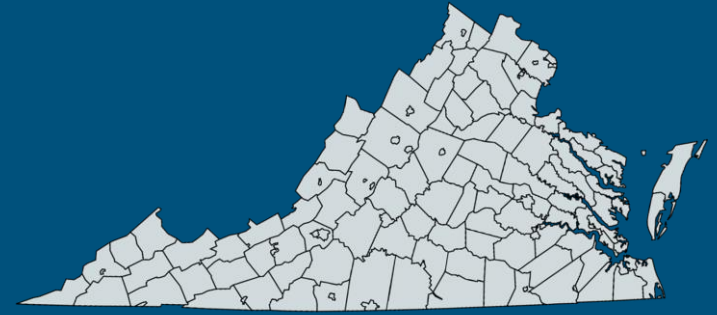
Special Topic: Funding

New Project Proposal: August 2021

- **Sentinel monitoring**
 - Influent monitoring at 25 wastewater treatment plants
- **Localized projects**
 - Sewershed monitoring upstream of influent
- **Variant surveillance**
 - Monthly sampling at upwards of 20 sites for variants of concern

Utilities can apply here!

Sentinel Monitoring

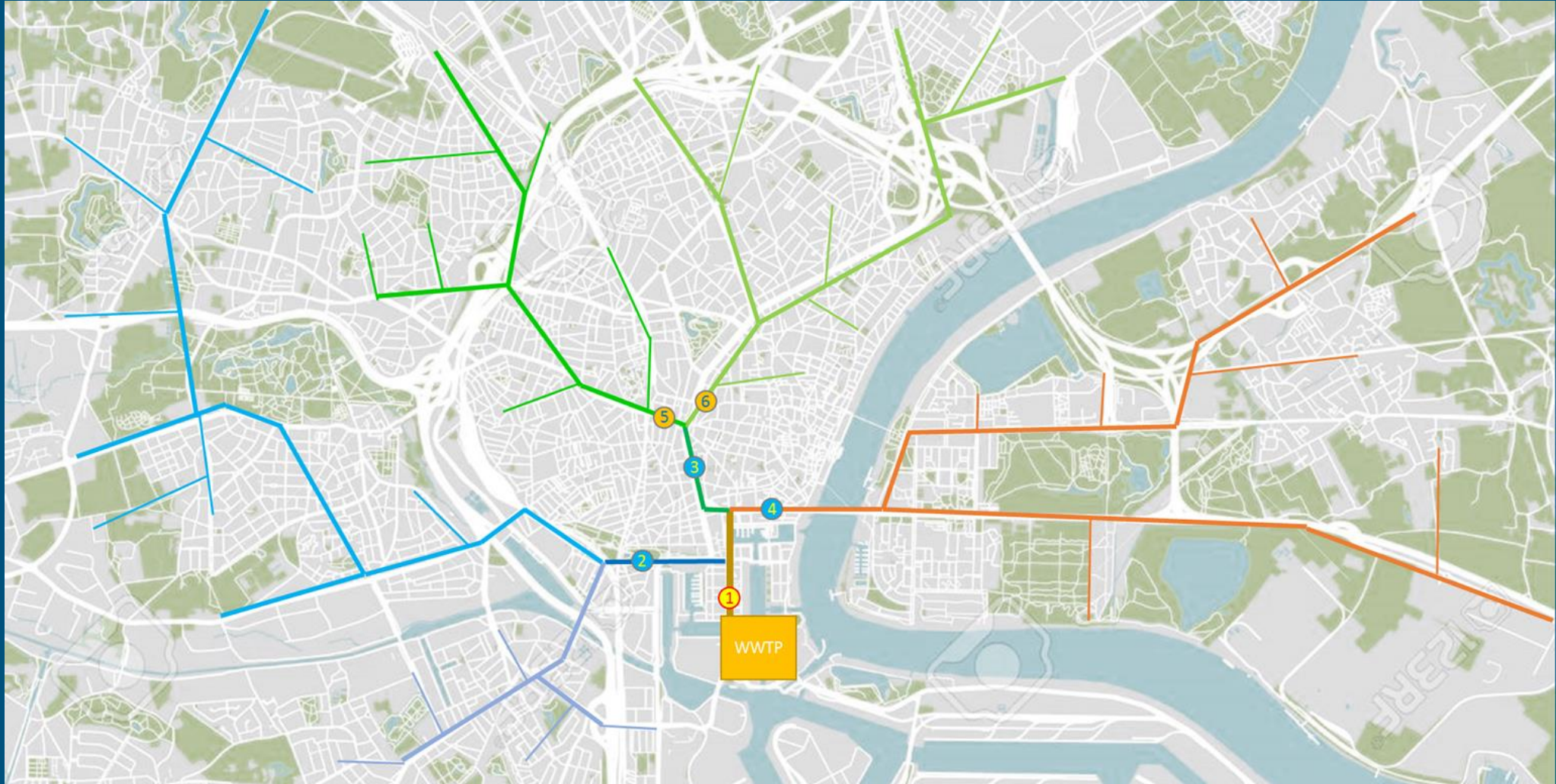


SARS-CoV-2 monitoring at influent to 25 wastewater treatment plants statewide

Utility must submit application to be considered

- **Application** will determine utility's ability to meet necessary DCIPHER NWSS data requirements
- **Reimbursements** for analytical and shipping costs

Localized Projects



Wastewater Variant Tracking



VDH will select a subset of positive samples from sentinel monitoring sites for variant *detection* and *tracking* using:

- Targeted mutation: **RT-ddPCR**
- Target enrichment: **amplicon-based sequencing**

Questions Received on Funding

- What are the costs to the utility?
- Is it just for plant influent monitoring, or are looking at removals through the process?
- Will the utility get their data in a timely manner?

Open Q&A/Discussion



Questions?
Comments?

See you next month!

Send inquiries / topics to:
rekha.singh@vdh.virginia.gov